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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,282	06/26/2003	Shiro Kawashima	WATK:241B	3309

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ALEXANDRIA, VA 22314-2805

EXAMINER

KOEHLER, ROBERT R

ART UNIT PAPER NUMBER

1775

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/606,282

Applicant(s)

KAWASHIMA ET AL.

Examiner

Robert R. Koehler

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on October 2, 2003 (Prel. Amdt.).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 and 20 is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

RRK.
4-21-05

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10022003; 11032003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

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Continuation of Attachment(s) 6). Other: Information Disclosure Statement Paper No./Mail Date 02252004.

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DETAILED ACTION

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 to 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 to 18 are rejected as being vague and indefinite because each of independent claims 1, 7, 8, and 9 requires that a surface-treated product has a surface "that moves relatively in a fluid." It is not clear whether the claimed relative movement refers to a fluid or to the surface of a surface-treated product. It would seem that the surface-treated product remains stationary while the fluid moves past the surface of the product, but the Examiner believes that the present claim wording introduces other interpretations which are vague and indefinite.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 to 5, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S.

Patent No. 4,797,327 (Honda, et al.).

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Honda, et al. discloses a surface-treated metal member having unevenness with a plurality of spherical, continuous impressions formed on the surface of the member. The overlapping impressions form a continuous structure of dimples on the surface; see Figure 3 and lines 52 to 65 in column 4. The spherical, continuous impressions are produced by a predetermined number of falling spheres. The base material can be any kind of metal such as aluminum alloys, magnesium alloys, stainless steels, or iron-base alloys, and the base material can be in a variety of forms such as plates, cylinders, or columns. The surface-treated member can be a surface finish of R_{max} of 1 micron or less. See lines 7 to 59 in column 5. The spherical-shaped impressions have dimensions of width (diameter) and depth which overlap applicants' claimed diameter and depth of a dimple. See Figure 1 and lines 3 to 21 in column 7.

Allowable Subject Matter

Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 (as well as dependent claims 10 to 18) would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Claims 19 and 20 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The prior art search has not produced any references which teach, suggest, or disclose applicants' claimed surface-treated product made of cast iron or a light alloy wherein the surface-treated product has a surface containing continuous dimples, each dimple having a diameter of 10 to 2500 microns and a depth of 50 microns or less, and the surface-treated product is selected from an automotive air intake system parts group consisting of an intake manifold, turbine housing, compressor cover, cylinder head, and air duct. Also, the prior art

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does not teach, suggest, or disclose applicants' claimed surface treatment apparatus for treating the surface of an object comprising a fixing means for holding an object in an enclosed space in which a surface treatment material is placed and an oscillating means that causes oscillation of the fixing means. The Examiner believes that U.S. Patent No. 2,777,256 (Paasche) is relevant prior art that teaches an apparatus for graining surfaces, but the patent does not teach or reasonably suggest an apparatus having a fixing means for holding an object in an enclosed space in which a surface treatment material is placed and an oscillating means that causes oscillation of the fixing means.

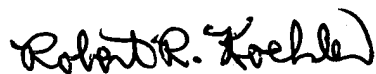
Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Robert Koehler whose telephone number is **(571) 272-1536**. The Examiner can normally be reached on Tuesday to Friday from 9:30 AM to 7:00 PM. The Examiner can also be reached on alternate Mondays.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Deborah Jones, can be reached on **(571) 272-1535**. The fax phone number for the organization where this application or proceeding is assigned is **703-872-9306**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at **866-217-9197** (toll-free).

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A handwritten signature in black ink, reading "Robert R. Koehler". The signature is written in a cursive style with a large, stylized "K".

ROBERT R. KOEHLER
PRIMARY EXAMINER

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April 21, 2005